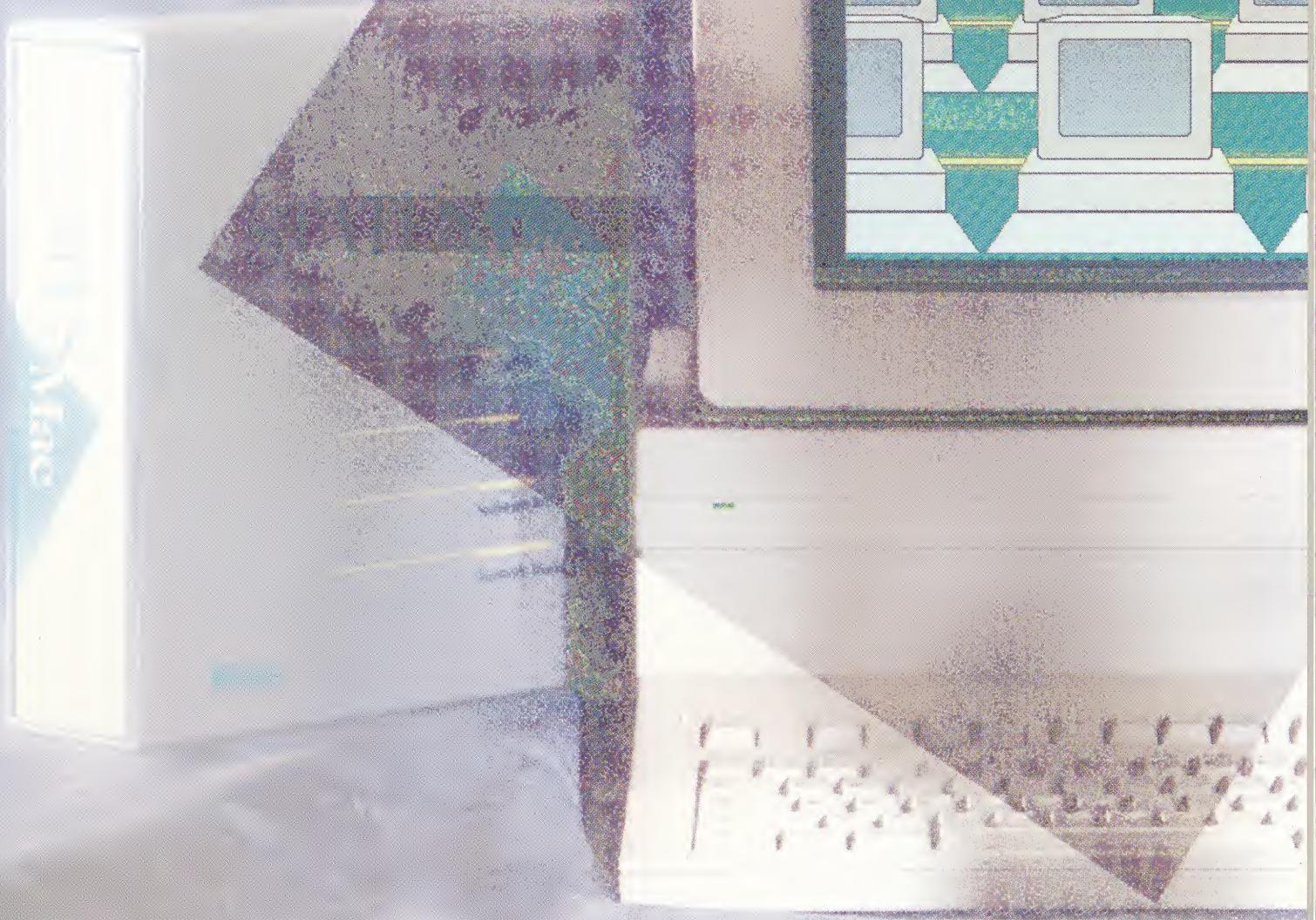
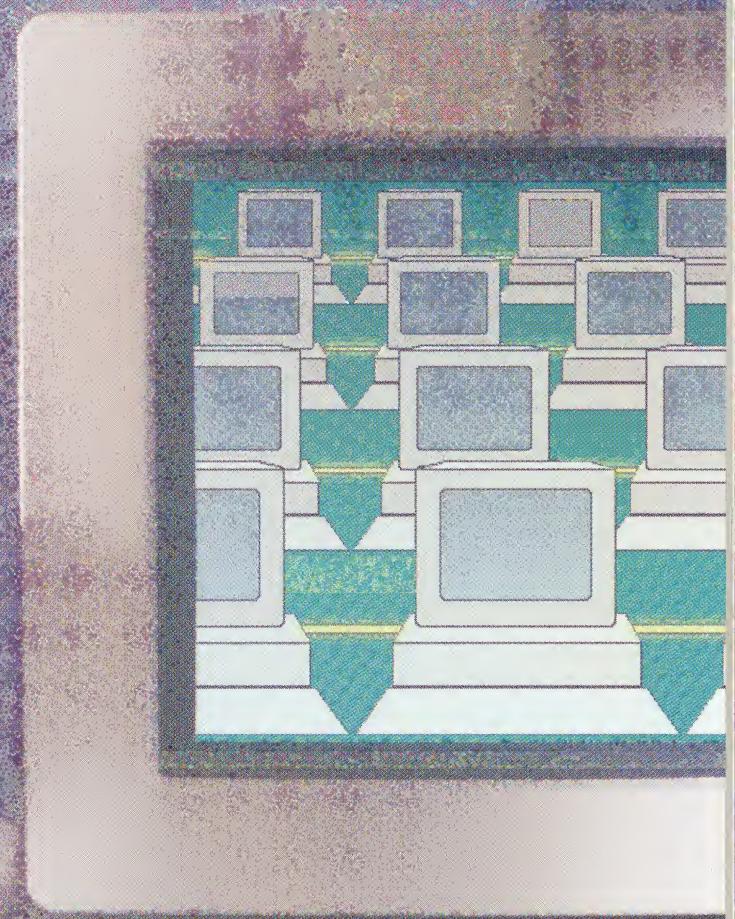


Essential Software for Macintosh Managers

STATUS Mac™



Essential software.

As the complexity of microcomputer management grows, a new generation of productivity tools will emerge. More powerful, more sophisticated than ever before, these software tools will provide an intuitive means to gain truly meaningful information.

Essential information.

Information which allows proactive Macintosh management. Information which permits the implementation of advanced technologies. Information which leverages your time and knowledge.

An essential decision for the New Age of Macintosh Management...

STATUS*Mac.

STATUS*Mac provides the ability to rapidly profile, inventory and analyze the critical hardware and software components resident on Macintosh systems. Whether you manage 10 Macs or 10,000, STATUS*Mac provides a powerful new way of looking at your world.



STATUS*Mac Benefits...

STATUS*Mac immediately and dramatically leverages the value of your time and effort.

Manage Macintoshes remotely

- gather comprehensive and accurate information without leaving your office
- rapidly view and analyze pertinent information about every Macintosh you manage

Prepare for the System 7.0 transition

- use STATUS*Mac to accumulate information necessary for your network's transition to System 7.0

Optimize your Macintosh environment

- identify potential hardware or software conflicts before they cause problems for you and your users
- effectively manage hardware and software standards to ensure workgroup compatibility

Track hardware and software assets

- quickly inventory hardware and software
- easily verify software license compliance by generating reports of application versions and their users
- format your findings in custom reports for approval of additional purchases

Repay your STATUS*Mac investment many times over—Guaranteed

- most Macintosh Managers will find their investment in STATUS*Mac is repaid after its first use!
- Pharos provides a 30 day money-back guarantee



How STATUS*Mac Works...

With STATUS*Mac v1.0, Profile request and collection is accomplished through use of a unique profiling process which can be performed in several convenient ways.

One method involves the use of a special application named the Portable Profiler. The Portable Profiler can be sent via electronic file transfer, launched from an AFP-compliant file server or run from a floppy disk.

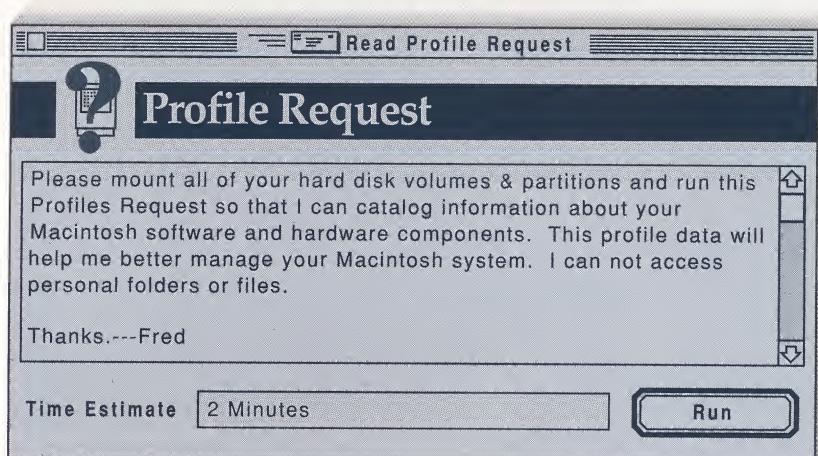
Profiling is also easily and elegantly achieved through a convenient interface with Microsoft® Mail. A special MS Mail profiling form is included in the STATUS*Mac Base Package.

Once collected, the profiles are imported into the Master Database for reporting and analysis purposes.

The STATUS*Mac Profile...

A Profile is a comprehensive record of the critical hardware and software components in use on an individual Macintosh. STATUS*Mac examines target systems and gathers information about all major categories of files and devices.

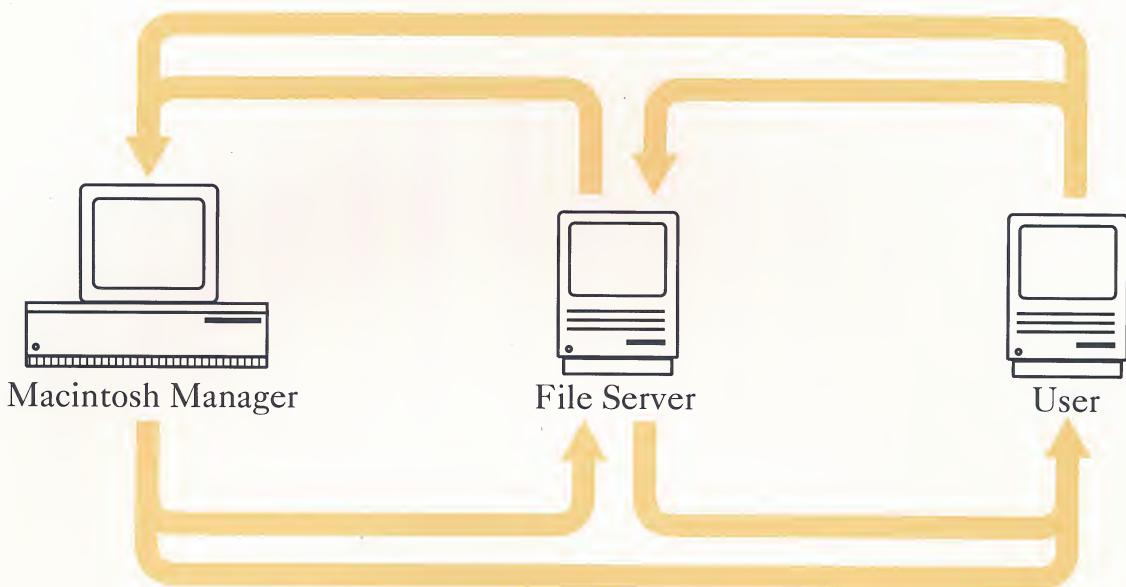
A Profile Request arrives in a user's mailbox. The user may run the application immediately or select the Close box to store for later processing.



STATUS*Mac provides two ways to send the profile request and receive profile results:

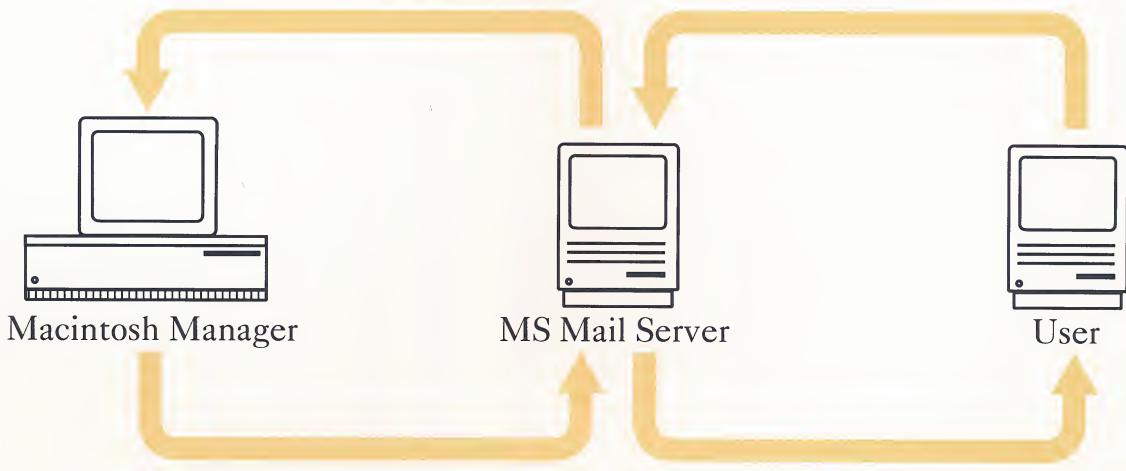
■ **With the Portable Profiler**

The profiling process can be conveniently achieved through use of an application named the Portable Profiler. The Portable Profiler may be sent via electronic file transfer or floppy disk to any Macintosh user. The profiling application may also be launched by multiple users from an AFP-compliant file server. The Portable Profiler will generate a data file that contains comprehensive information. This data is then imported into the Master Database.



■ **With Microsoft Mail**

STATUS*Mac also interfaces elegantly with Microsoft Mail to send profile requests and automatically return the profile results to a special collection mailbox. This is possible because of Microsoft Mail's programmable forms technology. STATUS*Mac then retrieves the results from the mailbox and automatically updates the Master Database.



What's in a Profile?

A STATUS*Mac Profile contains the following information:

ADB Devices

Device Type

Applications

Allocated Memory
Application Name
Creation Date
Creator
Data Fork Size
Modification Date
Resource Fork Size
Suggested Memory
Total Size
Type
Version
Volume Name

CPU Information

Active System
AppleTalk Version
Color QuickDraw?
FP Coprocessor?
Machine Type
MultiFinder?
Processor Type
RAM Cache Setting
RAM Cache Size
RAM Size
ROM Version
System Heap Size

Monitors

Device Type
DPI Horizontal
DPI Vertical
Horizontal Pixels
Main Screen?
Pixel Depth
Vertical Pixels

NuBus™ Boards

Board ID
Board Name
Part Number
Revision Level
Serial Number
Slot Number
Vendor Name

Requests Management

Latest Profile
Latest Request
Latest Receipt
Profiling Duration

What's NOT in a Profile

STATUS*Mac will not gather information about personal files or folders.

Desk Accessories

File Name
In Use?
Resource ID
Resource Name
Total Size
Volume Name

Drivers

File Name
Resource ID
Resource Name
Total Size
Volume Name

Fonts

File Name
In Use?
Point Size
Resource ID
Resource Name
Total Size
Volume Name

INITs

File Name
In Use?
Resource ID
Resource Name
Total Size
Volume Name

SCSI Devices

Device Type
Model Name
Revision Level
SCSI Address
Vendor Name
Version

System Files

Creation Date
Creator
Data Fork Size
File Name
In System Folder?
Modification Date
Resource Fork Size
Total Size
Type
Version
Volume Name

Users

User Name
Zone/Server Name

Volumes

Device Type
File Count
Fixed Drive?
Folder Count
Kbytes Free
Kbytes Used
SCSI Address
System Volume?
Total Size
Volume Name

The STATUS*Mac Master Database...

The Master Database stores profile results and makes them readily available for analysis.

- use templates to search, sort and filter information in the database
- generate custom reports
- use the "Quick Look" feature to obtain a rapid overview of any Macintosh profile
- export profile data in SYLK or TEXT formats for spreadsheet analysis
- archive the Master Database for historical review

Templates and Reports ...

It's easy to design your own custom templates for viewing Master Database information. In addition, the STATUS*Mac Base Package includes more than 50 ready-made templates for your convenience.

Below are examples of vital information accessed through ready-made templates.

Application Inventory

Word Users				
User Name (Users)	Application Name (App)	Creator (App)	Version (App)	Allocated Memory (App)
Adams, Roger S.	Microsoft Word 4.0 WORD	MSWD	4.0	512
Armstrong, Cheryl		MSWD	4.0	512
Benton, Elizabeth A.	Microsoft Word	MSWD	4.0	2,000
Burton, Frederick T.	Word 4.0	MSWD	4.0	450
Casper, Chris	Microsoft Word 3.01	MSWD	3.01	250
Casper, Chris	Microsoft Word	MSWD	4.0	512
Christian, Tony	Word 4.0	MSWD	4.0	512
Clausen, Kurt	Word	MSWD	3.01	512
Egan, John	Microsoft Word 4.0	MSWD	4.0	400
Floyd, Carol	Microsoft Word 4.0	MSWD	4.0	400
Franks, Carl	MS Word 4.0	MSWD	4.0	512
Franks, Carl	Microsoft Word 3.01	MSWD	3.01	300
Johnson, Kathleen C.	MS Word 4.0	MSWD	4.0	750
Jones, John	Microsoft Word	MSWD	4.0	1,024
Kraft, Roger S.	Microsoft Word	MSWD	4.0	512

RAM Size

RAM Size/MF				
User Name (Users)	Machine Type (CPU)	RAM Size (CPU)	Active System (CPU)	Multifinder ? (CPU)
Floyd, Carol	IICX	1,024	6.0.2	ON
Egan, Jim	IICX	2,048	6.0.3	ON
Jones, John	IICX	2,048	6.0.4	OFF
Burton, Frederick T.	IICX	4,096	6.0.3	OFF
Clausen, Kurt	IICX	4,096	6.0.3	ON
Franks, Carl	IICX	4,096	6.0.3	OFF
Sweetwater, John T.	IICX	4,096	6.0.3	ON
Casper, Chris	IIFX	4,096	6.0.5	ON
Kraft, Roger S.	IIFX	4,096	6.0.5	ON
Johnson, Kathleen C.	IIX	2,048	6.0.3	ON
Armstrong, Cheryl	Plus	1,024	6.0.2	OFF
Youngman, Gloria M.	Plus	2,560	6.0.2	OFF
Franks, Carl	Portable	1,024	6.0.4	OFF
Christian, Tony	Portable	2,048	6.0.4	ON
Schoofs, Tim	SE	1,024	6.0.3	OFF

Disk Space Available

User Name (Users)	Volume Name (Vol)	Volume Type (Vol)	KBytes Free (Vol)	Total Size (Vol)
Adams, Roger S.	Cheyenne	Hard Disk	23,456	80,187
Armstrong, Cheryl	FX40	Hard Disk	3,442	40,156
Benton, Elizabeth A.	LOTSA STUFF	Hard Disk	45,777	138,758
Burton, Frederick T.	HD140	Hard Disk	21,429	139,988
Casper, Chris	FX40	Hard Disk	1,044	41,223
Christiani, Tony	Valhalla	Hard Disk	487	20,547
Clausen, Kurt	610 Cirrus	Hard Disk	243,985	608,774
Egan, John	FX40	Hard Disk	5,438	41,237
Floyd, Carol	Floyd Volume 1	Hard Disk	15,877	78,499
Franks, Carl	PM DATA	Hard Disk	57,891	101,442
Franks, Carl	Mac HD	Hard Disk	3,951	19,885
Johnson, Kathleen C.	FX80	Hard Disk	13,886	80,152
Jones, John	JJ Drive	Hard Disk	15,242	21,839
Kraft, Roger S.	FX80	Hard Disk	2,455	78,520

Virus Protection

User Name (Users)	Resource Name (INITs)	In Use? (INITs)	File Name (INITs)	Volume Name (INITs)
Armstrong, Cheryl	VirexINIT	NO	Virex® INIT 1.41	Mac HD
Benton, Elizabeth A.	VirexINIT	YES	Virex® INIT 1.51	FX40
Franks, Carl	VirexINIT	NO	Virex® INIT 1.51	LOTSA STUFF
Adams, Roger S.	VirexINIT	YES	Virex® INIT 1.51	Mac HD
Burton, Frederick T.	VirexINIT	YES	Virex® INIT 1.51	FX40
Casper, Chris	VirexINIT	YES	Virex® INIT 1.51	Valhalla
Clausen, Kurt	VirexINIT	YES	Virex® INIT 1.51	Mac HD
Egan, Jim	VirexGuard	YES	Virex® INIT 1.51	FX40
Floyd, Carol	VirexINIT	YES	Virex® INIT 1.51	Floyd Volume 1
Franks, Carl	VirexGuard	YES	Virex® INIT 1.51	Mac HD
Johnson, Kathleen C.	VirexINIT	YES	Virex® INIT 1.51	PM DATA
Jones, John	VirexINIT	YES	Virex® INIT 1.51	FX80
Kraft, Roger S.	VirexINIT	NO	Virex® INIT 1.51	JJ Drive

System Components

For the Macintosh Manager workstation:

- Macintosh CPU
- System 6.02 or higher
- Hard disk
- Connected to AppleTalk™ compatible LAN (if server-based option is used)
- STATUS*Mac Manager software

For the Server (if server-based option is used):

- Macintosh CPU
- System 6.02 or higher
- Hard disk
- Connected to AppleTalk compatible LAN

For Macintoshes in the Supported Domain:

- Macintosh 512KE or higher
- System version 4.2 or higher

How to Order STATUS*Mac

The STATUS*Mac Base Package

A Macintosh Manager should first obtain the STATUS*Mac Base Package. The Base Package includes complete documentation, the STATUS*Mac profiling applications, the STATUS*Mac Master Database (with a 10 profile limit), 53 standard templates for the Master Database and unlimited technical support.

Profile Limit Upgrades

Profile Limit Upgrades (PLUs) are necessary for any Macintosh Manager who supports more than 10 Macintoshes. These upgrades will expand the capacity of the Master Database beyond the 10 profile limit of the Base Package. Optimally, a Macintosh Manager's Master Database will have a profile limit at least equal to the number of Macintoshes in the manager's domain.

For example, a manager who supports 50 Macintoshes would purchase the STATUS*Mac Base Package (which contains a Master Database with a 10 profile capacity) plus a Profile Limit Upgrade for an additional capacity of 40 profiles.

As your support domain grows, you can expand your Master Database capacity. We'll issue new Profile Limit Upgrades as your needs change.

Training and Consulting

STATUS*Mac training and customized consulting are available through Pharos' Network Services Division (NSD).

Training can be conducted either at your location or Pharos' headquarters. Course content is tailored to meet the specific needs of your organization.

Pharos NSD also provides a wide range of expert consulting services for Macintosh-based networks. These services include the use of STATUS*Mac to provide installed-base analysis, construct network migration strategies and gather information essential for System 7.0 transition. If desired, Pharos NSD will provide on-site implementation of STATUS*Mac and, in many cases, can provide STATUS*Mac consulting remotely from Pharos headquarters.

For more information on STATUS*Mac training and consulting, contact Pharos' Network Services Division at 1-513-984-9273.



Pharos Technologies, Inc.

Commercial Products Division
Innovative Software for Macintosh

Network Services Division
*Expert Consulting Services for
Macintosh-based Networks*

Custom Development Division
*Proprietary Macintosh Groupware
for Leading Businesses*



TECHNOLOGIES, Inc.

4243 Hunt Road
Cincinnati, Ohio 45242

To order STATUS*Mac, call Pharos at **1-800-548-8871**
or,
for international customers, **1-513-984-9273**

FAX 1-513-984-1653

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SUPPORT



SYSTEM 7.0

Be Prepared.

It's summer 1991, System 7.0 has been released by Apple, and you're busy understanding the consequences and planning the timing of a transition to 7.0. The phone rings. On the other end is a user who can't print to a LaserWriter because it has been reinitialized with a driver that is incompatible with the Laser Prep driver in System 6.0.5. You check into this and discover that three users have installed System 7.0 without your knowledge. They like 7.0 and want to use it now. They've read about exciting new applications that use IAC, applications that they claim will help them be more productive and competitive in their work. One of the users is the vice-president of advertising who wants very badly to use a groupware system that allows simultaneous editing of artwork

This scenario is only one of many that may happen. It is indicative of the type of situations that will confront Macintosh support managers sometime in 1991. Users will expect to make the transition to System 7.0 on a timely basis, particularly if it brings them significant advantages in their work. Users will also expect the transition to 7.0 to be without serious interruption to their daily computing and communications.

Fundamental to a successful transition to 7.0 is detailed knowledge about your domain of Macs. Inevitably, there will be conflicts that exist between some software and hardware that users have on their Macs — old versions of application software that are not 32-bit clean, INITs that are not well-behaved, boards whose firmware ROMs have not been replaced with more current versions. You will want to know your potential exposure to these conflicts and the extent to which they may affect your transition plans and budget.

STATUS*Mac was designed with the System 7.0 transition in mind. It gathers a comprehensive set of configuration information from all user volumes. No stone is unturned. STATUS*Mac finds out information on all applications, desk accessories, INITs, system files, cdevs, RDEVs, adevs, gdevs, ddevs, drivers, volumes, NuBus™ boards, SCSI devices, monitors, ADB devices, fonts, and the CPU. As more details emerge about incompatibilities, you can quickly search the STATUS*Mac database to determine if you have any of these problems in your support domain.

Historically, major operating system changes in personal computers have caused problems. Many of these problems could have been prevented if there were tools available to help a company prepare for the transition. With STATUS*Mac, you have an opportunity that, until now, has been rare in personal computer support. You can properly prepare for System 7.0. In fact, many companies are using STATUS*Mac to periodically analyze their 7.0 readiness and determine adjustments in strategy. This "Be Prepared" approach will ultimately save them much time, effort, and money when the moment for System 7.0 implementation is at hand. ■



SUPPORT C - o - s - E - U - P

VALUE

The Value of Effective Support.

Why does your company invest in Macintosh computers?

Does your company's current support approach help realize the anticipated return on that investment?

Effective support should maximize a company's expected return on its Macintosh investment! STATUS*Mac™ from Pharos Technologies, Inc. is the right support tool to help you accomplish that goal.

The value of STATUS*Mac, and the basis for its cost justification, is best understood by focusing on three areas:

- Cost of support without STATUS*Mac;
- Cost savings with STATUS*Mac;
- Value of ongoing interaction with Pharos Technologies.

You can determine the current cost of support without STATUS*Mac by answering several important questions:

- What is the value of time lost by you and your support staff when you visit individual user stations to resolve configuration problems, or to obtain a complete and comprehensive inventory of software and hardware?
- What does it cost to handle "hotline" problems; particularly ones that could have been prevented if you had foreknowledge of potential hardware and software conflicts?
- What does it cost your company, in time lost, when a user encounters a serious computing problem related to an improper system configuration?
- What does it cost the company when a workgroup or organization can't share information seamlessly?
- What is the value of reducing inappropriate hardware and software expenditures; ones that could have been prevented if you knew more about user configurations?
- Is there a significant savings associated with accurately predicting hardware and software budget requirements for each fiscal year?
- Does the company gain a competitive advantage if each user station is at optimum performance and capability?
- Is there value associated with monitoring and preventing software copyright infringement?

The real value of effective support lies in the collective answers to questions like those above. Would the savings be \$100 per user per year, or is it more like \$500? Maybe higher? There are hard expense dollars related to the costs of maintaining a support staff and delivery system, but the value associated with a company's competitive success also looms large and may very well be the key to support cost justification in the information age.

In light of the questions asked above, cost savings with STATUS*Mac are immediately apparent. You gain the ability to gather comprehensive and accurate profiles remotely. There's no need to hustle out to user stations all the time, nor do you have to mount a major campaign to do annual or semi-annual hardware and software inventories.

Once the profiles are collected in the STATUS*Mac database, a wealth of information is available for rapid analysis of individual and workgroup conflicts. Potential problems can be identified and proactively resolved before they become major problems that cause significant loss of time for you and others in the company. You can determine where incompatibilities exist between workgroups, thus ensuring seamless sharing of information. This reduces time-consuming conflicts that can lead to lost opportunities, missed project deadlines, and other business catastrophes that directly affect a company's competitive success. Moreover, you can easily present an accurate inventory of hardware and software. That's a real plus for optimizing hardware and software utilization and planning yearly budget targets.

As a further consideration, you should take a good look at the value of ongoing interaction with Pharos Technologies, Inc. Pharos has been a leader in Macintosh support since 1986, and considers effective support to be a core part of its corporate mission. This is best exemplified by its toll-free support for STATUS*Mac. This support is available to any registered user of STATUS*Mac and includes not only technical support for installing and using STATUS*Mac, but also consultative support on interpreting profile data and using STATUS*Mac to accomplish your strategic support objectives. This offers you an opportunity to form an important business partnership that can provide real value that accrues to the bottom line.

Effective support of Macintosh computers must be treated as a professional discipline requiring excellent tools and knowledge that offer considerable value. Pharos delivers the very best in both. ■



SUPPORT

MAC
C L O S E - U P

APPROACH

Complete and Accurate.

One of the primary benefits of STATUS*Mac is its ability to capture a truly comprehensive and accurate configuration profile of every Macintosh in a supported domain. Each Mac profile contains detailed information about all critical hardware and software on all local mounted volumes. This detailed information is the basis for performing inventory/audit analysis and problem identification/prevention.

To ensure greatest value to your support process, configuration profiles must be captured efficiently and effectively — preferably through a network, but not in a way that requires shortcuts that return compromised profiles, or interferes with (and offends) the users to whom support is provided.

On the surface, profiling of user Macs appears to be a simple and straightforward process. In reality, there are many factors to consider:

- Effective support requires comprehensive and accurate profiling of all critical hardware and software components on all local mounted volumes and partitions. Such comprehensive profiling makes heavy use of the processor and can require several minutes to complete;
- Software designs that attempt to cut profiling time often cause inaccurate and incomplete results;
- Not all networked Macs are turned on at the same time;
- Even if a Mac is on, the user may be involved in a time-critical event that requires intensive CPU access;
- Many Macs are not networked but require the same level of support;
- To accurately determine a user configuration, all profile items should be gathered at the same time;
- Network traffic congestion and bandwidth restrictions can interfere with attempts to capture profiles in real-time. Also, constant profiling and re-profiling of user Macs can adversely affect normal network traffic;
- Your time is limited. You shouldn't be required to spend a great deal of time at your Mac just trying to gather profiles. In particular, you should not have to manually broadcast to individual machines in real-time to successfully build a profile database;

- A Mac that is experiencing serious problems may not be able to start up under a user's normal system configuration;
- More and more support managers must support Macs across different geographical locations and time zones.

Familiarity with these factors is the result of Pharos' extensive research and experience in working with many large Macintosh installations. A thorough understanding of these factors and their underlying realities has led to important design logic in the development of STATUS*Mac. This logic can be expressed as follows:

- Profile requests must be easy to address and send to one user, a group of users, or the entire supported domain;
- If you send out a profile request to one or more networked Macs, and a recipient Mac is turned on, the software should notify the user right away of the request, otherwise store the request and forward to the user Mac when it is on;
- Since users may often be involved in time-critical events on the Mac, the request notification must provide the option to postpone running the profiler until the user's schedule permits. In the case of unattended Macs, it should notify, wait, and then (if no user cancellation occurs) start profiling;
- Once the profile has been run, it should be returned to your Mac. If your Mac is not turned on, the profile should be stored for later forwarding when your Mac is available;
- The profile data must be centrally collected and stored in a database where it can be analyzed by you regardless of the current condition of user Macs or the network;
- There should be a way to profile Macs that are not accessible via a network.

This design approach provides you with the flexibility to capture all necessary information in a way that maximizes time savings for both you and the supported users. It also permits the capture of comprehensive and accurate information, a must if you wish to gain a true understanding of your supported domain.

For example, it can be very important to know all the applications on all local user volumes, their versions, and possibly their allocated memory settings. Such



information can be vital to configuration integrity and workgroup compatibility. The only way to accurately obtain complete application information is to comprehensively profile all local mounted volumes at the lowest possible level of file identification. Any method short of this comprehensive, low level profiling can cause serious inaccuracies that will often return misleading results about applications (and other file types).

Another example is duplicate system files. Users often make the mistake of copying extra system folders onto their drives. This can cause many system-related problems, which in turn cause confused users to call for help. Comprehensive profiling will expose extra system files. Shortcut profiling will not.

Further study of the STATUS*Mac approach reveals other important benefits:

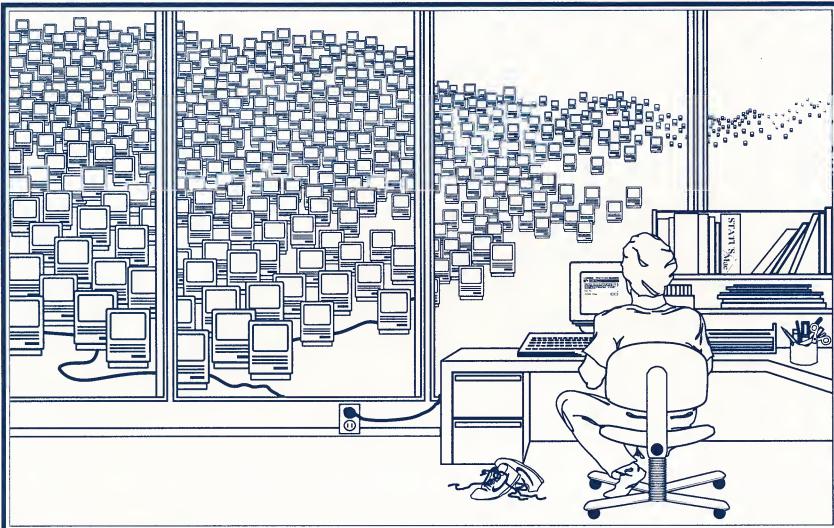
- Because STATUS*Mac has a built-in database, you can review a user profile even if that user Mac is off, won't boot properly, or if the network is under heavy traffic load;
- You are able to analyze individuals or entire domains of profile data without having to continually broadcast queries across your network;
- You can allow the profile request and collection process to happen without your ongoing direct involvement — this feature alone can save you considerable time and effort.

As can be seen above, acquisition of Mac configuration profiles requires a balance between what is efficient and what is effective. As with many areas, shortcuts will often return inferior results, but a solid, comprehensive approach can yield valuable benefits.

Through its technical and consultative support, Pharos continues to receive excellent feedback and advice from its broad global base of customers. Such feedback will continue to influence the design logic and flexibility associated with STATUS*Mac and will help Pharos design even more valuable products for you. ■

MANAGING THE MAC

A New Approach...



Jacqueline Nauchion

THE TIME HAS COME

to designate Macintosh support management as its own province.

Until now, Mac management has been seen primarily as a subset of network management. While this may be appropriate from an organizational perspective, it does not accurately reflect the skill and knowledge required for effective Mac support.

Managing the Mac is quite different from managing the network. The two areas do overlap and influence one another, but the skill, knowledge, and tools required to effectively manage Macs are not the same as those required to manage the network and its associated devices. Each area has its own terminology, hardware, software, and corresponding problems. Most importantly, the support domains can be different, and with the advent of workgroup computing, diverge even further (see page 2).

In today's personal computing environment there are numerous opportunities for system conflicts and

maintenance problems. *Managing the Mac* has become a special challenge demanding new tools, new terminology, and a redefinition of end-user support.

A good example of this new approach is STATUS*Mac, the first tool for *Managing the Mac* that fully leverages the time and effort of the Macintosh support manager. STATUS*Mac allows a Mac manager to profile every user station in a support domain, via a domain-wide request process, without leaving the office! Each profile contains comprehensive information about *all* applications, INITs, desk accessories, fonts, system files, CPU/system configuration, NuBus™ cards, SCSI devices, volumes, monitors, ADB devices, and drivers. This profile information can be automatically imported into a special database on the manager station and then rapidly filtered, sorted, displayed, printed, and analyzed - the first time such information has been so readily available!

As a result, a manager can now obtain rapid perspectives of an entire support domain with a minimum of effort, and

then apply those perspectives to the advantage of each Macintosh user and the institution in which they work.

The advantages are significant: 1) Mac managers can determine problems BEFORE they get out of hand; 2) They can ensure workgroup hardware and software compatibility; 3) Assets can be tracked; 4) Future purchases can be justified based on actual profile data. Taken together, these advantages can redefine the role and effectiveness of every Mac manager. It is the equivalent of a building inspector being able to analyze the integrity of each building in a township, provide solutions to structural problems, and document the township's real estate assets, all without leaving city hall.

The impact of a tool like STATUS*Mac is obvious. *Managing the Mac* can no longer be viewed as a side effort of network management. It is now its own province; highly beneficial and directly affecting the overall well-being of any organization of Macs.

SUPPORT DOMAINS

With the arrival of workgroup computing, the term "support domain" has taken on new meaning. We can no longer view end-user support as being restricted to managing one CPU at a time. To the contrary, *Managing the Mac* must be expanded to encompass the support of Macs as part of larger workgroups.

Workgroup computing raises the specter of incompatibility between software and hardware that resides on different Macs within a group. This incompatibility can be as simple as a version difference between applications or the lack of color for a given monitor. Or it can be as complex as the need for special software drivers and NuBus™ cards. Nonetheless, support problems can grow exponentially.

In addition, workgroups often transcend geographical boundaries. For logistical convenience, support domains have traditionally been located within a building or building cluster. Today,

Managing the Mac must be expanded to encompass the support of Macs as part of larger workgroups

workgroup support domains may extend great distances and involve international implications. The needs of such wide-ranging support domains require a broader perspective on *Managing the Mac*. These needs force a further divergence between *Managing the Mac* and managing the network, and redirect thinking about support management in general.

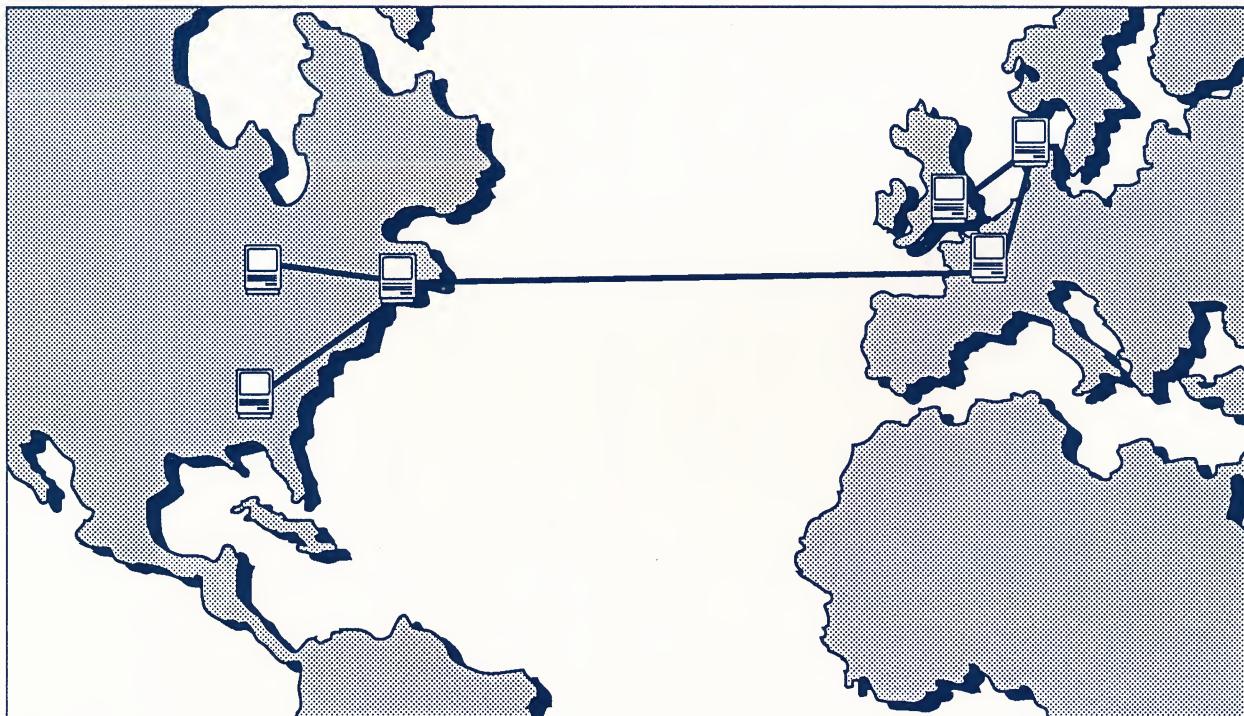
Managing the Mac requires new support tools and methods that allow each Mac manager to support users who are well beyond walking distance. Access to remote user stations is vital. Furthermore, because workgroups often overlap support domains, each Mac manager must be able to share information about his or her support domain with other managers. This helps minimize differences between domains and promotes compatibility for all workgroup participants.

As mentioned in the lead article, STATUS*Mac 1.0 is a new approach to *Managing the Mac*. But it is also a tool that meets the new definition of support domains. It is not bound to a specific geography, but allows any user station to be profiled regardless of geographical

distance! Mac managers can now extend support to workgroup participants who may previously have been excluded or inaccessible. Not only does STATUS*Mac make such support possible, but it also enhances the effectiveness and accuracy of the support provided.

The use of STATUS*Mac also allows Mac managers to share hardware and software information about their respective domains. This information is vital to ensure a smooth interaction among all participants in a workgroup, particularly one whose members reside in many different support domains. Mac managers can use STATUS*Mac to synchronize efforts around the introduction of new versions of software and hardware that impact various workgroups. A good example will be the transition to Apple's new System 7.0 (see page 3). Not only is System 7.0 a major upgrade, but it will spawn a whole new approach to workgroup computing - one that promotes considerable interaction across support domains.

Workgroups often transcend geographical boundaries



THE 7.0 TRANSITION

APPLE'S SYSTEM 7.0

will bring many new and exciting capabilities to the Macintosh. It will usher in a new era for workgroup computing. However, it will also bring a new round of training and support issues for Mac managers. The difference between a smooth or rough transition to System 7.0 will depend upon thorough preparation prior to the actual changeover.

Fundamental to any transition plan is a comprehensive profile of critical software and hardware that exists on every user station within a support domain. These comprehensive profiles can be analyzed to determine the upgrade needs of each Mac prior to and during the transition.

High on the list of potential upgrades is RAM capacity. It is almost certain that System 7.0 will require a minimum of 2 megabytes of RAM to operate. Effective operation for some computing environments may warrant even larger memory capacities.

An additional concern is upgrades to application software. Many software and hardware vendors will be upgrading their software to ensure compatibility with the new 7.0 technologies. A Mac manager will want to know if users have implemented

these upgrades. This information, coupled with the information about RAM capacity, will provide a solid foundation for the transition.

From a training perspective, it would also be helpful to know in advance who is actually using MultiFinder. In order to make inter-application communication possible, it is anticipated that System 7.0 Finder will incorporate MultiFinder and exclude a "single" Finder environment. As such, users who are unfamiliar with

without leaving the office. No more hard copy questionnaires, worn-out sneakers, and armies of system auditors trying to determine who has what. Instead, STATUS*Mac leverages

SYSTEM
6.X

the technology that Mac managers have worked so hard to implement and support in the first place.

System 7.0 will be a great leap forward for all Mac users and workgroups. STATUS*Mac can help make that leap easy and cost effective for all involved.

users who are unfamiliar with MultiFinder may require additional training support during the 7.0 transition.

STATUS*Mac is the perfect tool for managing the transition to System 7.0. As described on page 1, its comprehensive profile information includes all of the above items and much more! With STATUS*Mac, a Mac manager can

determine the extent to which user stations must be upgraded and supported during the transition, all

SYSTEM
7.0

Fundamental to any transition plan is a comprehensive profile of the critical software and hardware on every user station

STATUS REPORT

INITs and the System Heap

A major area of concern for *Managing the Mac* is the proliferation of INITs in the System Folder. On startup, most INITs load themselves into the System Heap, an area of RAM allocated for use by the operating system and related software (like INITs). Frequently these INITs will "patch" the operating system in an effort to enhance the functionality of the Mac.

Unfortunately, not all INITs are well-behaved. They sometimes cause system errors and other headaches for Mac managers. In addition, because INITs are loaded into RAM, they can take up a

sizeable amount of memory that could be used by applications. Since many of these INITs are attractive to users, RAM space dedicated to INITs can grow quite large. In fact, some users have so many INITs that the System Heap Size can grow to well over 1 megabyte of RAM! Needless to say, this can spell trouble for many system configurations.

STATUS*Mac offers a convenient way to determine if any Macs in a support domain are marginal with respect to memory. As part of its CPU profile category, STATUS*Mac gathers information about System Heap Size, RAM Size, RAM Cache Setting, and RAM Cache Size.

These items can be arranged in a STATUS Report that will show their respective values. An example of this report is shown below.

By comparing RAM Size to the amount of RAM used in the System Heap, a Mac manager can determine if users will possibly encounter out-of-memory problems, particularly if they try to open large documents, load multiple applications, or otherwise put demands on marginal memory. In the report below, Philip Jones' Mac is definitely in the danger zone!

System Heap Size					
#	User Name (Users)	System Heap Size (CPU)	RAM Size (CPU)	RAM Cache Setting (CPU)	RAM Cache Size (CPU)
1	Arminio, Kelly J.	346388	4096	OFF	0
2	Armstrong, Rick	709216	8192	ON	32
3	Beech, Robert P.	357852	4096	ON	96
4	Buchanan, Linda A.	281360	4096	OFF	0
5	De fine, Tracey L.	350752	2560	OFF	0
6	Jones, Philip	1103764	2560	ON	96
7	Roberts, Eric A.	190664	1024	OFF	0



To order STATUS*Mac, call Pharos at 1-800-548-8871, 513-984-9273,
or
fax 513-984-1653

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